

Name: _____

Date: _____

Math : _____

4.1 – 4.3 REVIEW SHEET

1. List the factors and the first 5 multiples of each number. Classify each number as prime or composite.

a. 12

Factors

Multiples

b. 63

Factors

Multiples

c. 13

Factors

Multiples

d. 51

Factors

Multiples

2. Simplify each expression.

a. 5^3

b. 3^5

c. $\sqrt{64}$

d. $\sqrt{121}$

3. Pencils come in packages of 10. Erasers come in packages of 12. Phillip wants to purchase the smallest number of pencils and erasers so that he will have exactly 1 eraser per pencil. How many packages of pencils and erasers should Phillip buy?

4. Kiara baked 35 oatmeal cookies and 45 chocolate chip cookies to package in plastic containers for her teacher friends at school. She wants to divide the cookies into identical containers so that each container has the same number of each kind of cookie. If she wants to have the greatest number of containers, how many plastic containers does she need?

5. Boxes that are 12 inches tall are being stacked next to boxes that are 18 inches tall. What is the shortest height at which the two stacks will be the same height?

6. Bridget has swimming lessons every fifth day and diving lessons every third day. If she had a swimming lesson and a diving lesson on May 5, when will be the next date on which she has both swimming and diving lessons?

7. Write the numerical expression for each phrase.

a. three less than five squared

b. the product of two and three, cubed

Name: _____

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4.1 - 4.3 REVIEW HOMEWORK

Your quiz on this material is on Friday, January 18

1. List the factors and the first 5 multiples of each number. Classify each number as prime or composite.

a. 12 **Composite**

Factors	Multiples
1×12	12, 24, 36, 48, 60...
2×6	
3×4	

b. 63 **Composite**

Factors	Multiples
1×63	63, 126 , 189,
3×21	252, 315, ...
9×7	

c. 13 **Prime**

Factors	Multiples
1×13	13, 26, 39,
	52, 65...

d. 51 **Composite**

Factors	Multiples
1×51	51, 102, 153, 204,
3×17	255...

2. Simplify each expression.

a. 5^3

$$5 \cdot 5 \cdot 5 = \boxed{125}$$

b. ~~5^5~~ 3^5

$$\begin{array}{r} \cancel{5} \cdot \frac{3 \cdot 3}{9} \cdot \frac{3 \cdot 3}{9} \cdot 3 \\ \hline 81 \cdot 3 = \boxed{243} \end{array}$$

c. $\sqrt{64} = 8$

d. $\sqrt{121} = 11$

3. Pencils come in packages of 10. Erasers come in packages of 12. Phillip wants to purchase the smallest number of pencils and erasers so that he will have exactly 1 eraser per pencil. How many packages of pencils and erasers should Phillip buy?

10, 20, 30, 40, 50, 60
12, 24, 36, 48, 60

6 packs of pencils
5 packs of erasers

4. Kiara baked ³⁵~~30~~ oatmeal cookies and ⁴⁵~~40~~ chocolate chip cookies to package in plastic containers for her teacher friends at school. She wants to divide the cookies into identical containers so that each container has the same number of each kind of cookie. If she wants each container to have the greatest number of cookies possible, how many plastic containers does she need?

$$\begin{array}{r} 35 \\ 1 \overline{) 35} \\ 5 \end{array}$$

$$\begin{array}{r} 45 \\ 1 \overline{) 45} \\ 9 \\ 3 \end{array}$$

5 containers

5. Boxes that are 12 inches tall are being stacked next to boxes that are 18 inches tall. What is the shortest height at which the two stacks will be the same height?

12, 24, 36
18, 36

36 inches

6. Bridget has swimming lessons every fifth day and diving lessons every third day. If she had a swimming lesson and a diving lesson on May 5, when will be the next date on which she has both swimming and diving lessons?

5 3 LCM 15

5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21
May 20

7. Write the numerical expression for each phrase.

a. three less than five squared

$$5^2 - 3$$

b. the product of two and three, cubed

$$(2 \times 3)^3$$

↑
comma!